REMARKS

Claims 1-12 are now pending in this Application. Claims 1 is an independent claim and the remaining claims are dependent claims. Claims 13-32 have been cancelled without prejudice.

Claims 1-32 were rejected under 35 U.S.C. §102(e) as being anticipated by Elwalid, et al., U.S. Patent No. 6,353,616 B1 (hereinafter Elwalid). The Applicants respectfully disagree with this contention and assert that the present claimed invention is not anticipated by any disclosure in Elwalid. The Applicants believe that the claims as presented are in condition for allowance. A notice to this affect is respectfully requested.

The Applicants have amended claim 1 to include the content of cancelled and previously examined claim 13. The Amendment does not add new matter to the application and clarifies the nature of the invention.

Examiner Interview

On June 9, 2003, the Attorneys for the Applicants conducted a telephone interview with Examiner Thien Tran to discuss the Applicants' claims and the claim rejections in light of the cited Elwalid reference. The Attorneys for the Applicants thank the Examiner for his time and consideration. While no agreements were reached with respect to the status of the rejection, with respect to the Elwalid reference, the Examiner's views and the Applicants' views were defined and clarified.

The Elwalid Reference

Elwalid relates to allocation of processing capacity of a router in a packet network to processing Reservation Setup Protocol (RSVP) control messages.[1] During RSVP communications, senders and receivers transmit control messages (e.g., signaling message requests), such as PATH messages, RESV messages, UPDATE messages, and

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[1]   Elwalid, col. 1, l. 10-12.

TEAR-DOWN messages.[2] Elwalid describes a packet network employing an RSVP system having routers that schedule the processing of RSVP control message based in part on link utilization.[3] The routers monitor link utilization, for example, as traffic experienced by the router, such as the average number of PATH, RESV, UPDATE, and TEAR-DOWN messages received by the router.

Elwalid also describes the routers as having a processing section that employs adaptive weight assignment with respect to the control messages to allocate processing capacity, of the processing section, for the control messages.[4] Elwalid assigns PATH & RESV messages to a first message class, UPDATE messages to a second message class, and TEAR-DOWN messages to a third message class.[5] The router allocates weights to each message class, based in part upon link utilization for each message class.[6] The weight of the message class then corresponds to a portion of the router processing section's processing capacity.[7]

Generally then, Elwalid relates to allocation of processing capacity of a router for RSVP control messages (as opposed to application data messages) according to weights assigned to the various control message classes, where the assigned weights for each control message class are based upon the link utilization for each control message class.

Applicants' Claim and Specification

By contrast, claim 1 of the present Application describes a method for dynamically adjusting reserved bandwidth in a data communications device while transporting a session of data communication within the device. The data communications device establishes a first bandwidth reservation associated with a session of data communication in the data communications device and transports, through the data communication device, **application data** associated with the session of data communication utilizing data storage locations associated with the first bandwidth

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[2] Elwalid, col. 6, l. 27-28.
[3] Elwalid, Abstract.
[4] Elwalid, Abstract.
[5] Elwalid, col. 6, l. 64-66.
[6] Elwalid, Abstract.
[7] Elwalid, Abstract.

reservation. The data communications device receives **bandwidth allocation adjustment information**, within a **bandwidth reservation request**, during the session of data communication. As an example, the "bandwidth allocation adjustment information" may indicate to reserve 10 MBps of bandwidth through the data communications device and this information is contained within the "bandwidth reservation request" that may be, for example, an RSVP RESV message. As further claimed, the data communications device dynamically adjusts the first bandwidth reservation to produce a second bandwidth reservation, **wherein the data communications device uses an RSVP protocol to determine an amount of bandwidth to reserve, for application data of the session of data communication** in accordance with the bandwidth allocation adjustment information within the bandwidth reservation request while continually maintaining the session of data communication. Accordingly, the present invention as claimed uses the RSVP protocol to determine an amount of bandwidth to reserve and obtains this amount as the bandwidth allocation adjustment information within a bandwidth reservation request. As clearly stated in the claim, this is done in order to dynamically adjust the bandwidth reservation from the first to the second bandwidth reservations for the application data of the session of data communication without breaking the session (i.e., while continually maintaining the session of data communication).

Rejection under 35 U.S.C. §102(e)

Claims 1-32 were rejected under 35 U.S.C. §102(e) as being anticipated by Elwalid. However, to anticipate a claim, the cited reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."[8] "The identical invention must be shown in as complete detail as is contained in the ... claim."[9]

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[8]   *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).
[9]   *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The Office Action, however, has not established that <u>Elwalid</u> anticipates claims 1-12 of the present Application because <u>Elwalid</u> does not teach, disclose or suggest every element of the Applicants' claims.

The Office Action indicates that, in applying <u>Elwalid</u> to claim 1, an RSVP protocol (e.g., RSVP message transmitted using the RSVP protocol) is the same as "application data" as claimed by the Applicants. As amended, claim 1 distinguishes "application data" from the RSVP protocol. The fourth element of Applicants' claim 1 describes the data communications device as:

> "dynamically adjusting the first bandwidth reservation to produce a second bandwidth reservation, <u>wherein the data communications device uses an RSVP protocol to determine an amount of bandwidth to reserve, for application data of the session of data communication</u> in accordance with the bandwidth allocation adjustment information within the bandwidth reservation request while continually maintaining the session of data communication."

Claim 1, therefore, distinguishes the application data as **a separate data session** from the RSVP protocol used to determine an amount of bandwidth to reserve for the application data. As described above, the Amendment to claim 1 to recite this limitation includes all of the description of cancelled claim 13 and does not add new nor unexamined subject matter to claim 1.

A detailed discussion of <u>Elwalid</u> is provided in the response to the first Office Action. Generally, <u>Elwalid</u> describes the use of the RSVP control messages to allocate bandwidth in the router for processing of those RSVP control messages based on the number or count of RSVP messages received. This is significantly different than the present claimed invention.

In particular, <u>Elwalid</u> does not teach the claimed limitations of receiving **bandwidth allocation adjustment information** (e.g., set application data stream XYZ to 10 MBps), within a **bandwidth reservation** request (e.g., a PATH or RESV RSVP message), and then using the **bandwidth allocation adjustment information within the bandwidth reservation request to** dynamically adjust the first bandwidth reservation to produce a second bandwidth reservation while continually maintaining the session of data

communication used to transport the application data. As specifically stated in the claim, the data communications device of the present invention uses an RSVP protocol to determine an amount of bandwidth to reserve, for application data of the session of data communication **in accordance with the bandwidth allocation adjustment information within the bandwidth reservation request** while continually maintaining the session of data communication. Since Elwalid is related to adjusting bandwidth available for processing RSVP protocol messages themselves and does so using counts of the number of RSVP messages received, there is no discussion in Elwalid of how to adjust bandwidth for an application data session that uses RSVP as a mechanism to reserve bandwidth while continually maintaining the application data session. From the claimed subject matter, it is clear that the RSVP protocol is different than the session of data communications used to transport application data. Since claim 1 contains limitations directed to this subject matter, it patentably distinguishes over Elwalid.

If the Examiner contends that the application in Elwalid is RSVP itself, and the application data session is an RSVP session, there is still no teaching in Elwalid that information contained within a particular RSVP message is used to adjust bandwidth of the application data session (i.e., the RSVP session itself, as contended by the Examiner) by using the RSVP protocol to determine the amount of bandwidth to reserve for RSVP itself, all while continually maintaining the session of data communication. It is unclear to the Applicants and it is certainly not taught, disclosed or suggested in Elwalid, how Elwalid would use the RSVP protocol to adjust bandwidth reservations of the RSVP protocol data session itself, as indicated in the claim limitations discussed above. Accordingly, a contention that the application data session is RSVP still does not cause a reading of the disclosure in Elwalid to anticipate each of the limitations of present claimed invention. If the Examiner contends otherwise, Applicants respectfully request that Examiner point out with particularity where each limitation as recited in Claim 1 is taught in Elwalid.

Because Elwalid does not teach all of the claimed elements of the Applicants' independent claim 1, claim 1 should be allowed to issue. Furthermore, claims 2-12 depend upon claim 1 and should also be allowed to issue as depending upon an allowable

independent claim (i.e., for at least the reasons presented). Reconsideration of the rejection is respectfully requested.
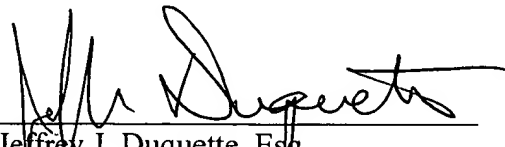
Conclusion

In view of the foregoing remarks, this Application should be in condition for allowance. A Notice to this affect is respectfully requested. If the Examiner believes, after this Response, that the Application is not in condition for allowance, the Examiner is respectfully requested to call the Applicants' Representative at the number below.

The Applicants hereby petition for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-0901.

If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned collect at (508) 366-9600, in Westborough, Massachusetts.

Respectfully submitted,

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